Material Handling Equipment Environmental Health and Safety

Table of Contents

١.

I. Purpose

This program establishes procedures for the safe operation atterial handling equipment uch as forklifts, motorized pallet jacks, tractors verhead cranes, hoist signing equipment and other similar equipment

II. Scope

Thisprogramapplies to the operation of allmaterial handling equipment Northwestern property bystaff and contractors

III. Responsibilities

- A. Environmental Health and Safet(EHS)
 - i. Review and revise this progration reflect changes in regulatory requirements as necessary.
 - ii. Provide consultatin and guidance when necessary.

B. Departments and Units

- i. Ensure operators attend all required trainiag required in Section/II.
- ii. Protect material handling equipment from unauthorized use. Keepipment keys in a secure location and only issue to trained and authorized operators.
- iii. Maintain documentation andecords required in Section VIII.
- iv. Ensure material handling equipment is inspected, operated, and maintained in accordance with Section and VI.
- v. Removæquipmentfrom service wheran operatoridentifies any condition that makes the unit unsafe to operate during inspection, maintenanceperation.
- vi. Comply with all safetyelated bulletins from the manufacturer, and communicate them to the operators.
- vii. Use reasonable diligence and make every effort to avoid contractor or other outside entity use of Universitywned material handling equipment contractors or other outside entities will be operating a Universityned material handling equipment, conta EtHS or approval.
- viii. ContactEHSo evaluate any safety concerns as specified in this program.

C. Operators

- i. Attend all training and evaluation prior to operating anyterial handling equipment.
- ii. Operate only those material handling equipment for which they are authorized, trained, and familiar with.
- iii. Completea pre-useinspectionprior to operation(checklists can be found on the EHS website).
- iv. Immediately cease operions when any problems, hazardous conditions, or malfunctions arise. Operations may only continue after all issues have been corrected.
- ix. Reportall maintenance issue accidents, or unsafe practices your manager or supervisor
- x. Followall safety and manufactureguidelinesand instructions.

D. Contractors

- i. Adhere to the requirements of this program.
- ii. Responsible for supplying and operat**the**ir own material handling equipment.
- iii. Prohibited fromoperating

V. Inspections

- A. Forklifts, Motorized Pallet Jacks Tractors, and Other Smilar Equipment
 - Complete a preuse inspection prior to operation and adhetrethe manufacturer's guidelines for additional prese inspection criteria, if applicable.Completed preuse inspection checklists must be submitted to supervisors.
 - ii. Preuse inspection checklists aon the EHSwebsite. Other preuse inspection checklists may be used if they meet the requirements of this program.
 - iii. Any safety defects, impairments, damage, or malfunctions must be reported to supervisors, and the material handling expresent must be immediately removed from service and tagged with a label "Dangerous: Do Notobse" similar wordinguntil repairedor replaced
- B. OverheadOranes, Hoists, and Rigging Equipment (e.g., Sings, Shackles, Hooks, Swivels, Rings, Chains, Wire Ropes, Eyebolts)
 - i. Pre-UseInspections
 - a. Complete a preuse inspection of overhead cranes, hoists, and rigging equipmentprior to operation
 - b. Documentation of pe-use inspections are not required forging equipment and overhead hoists.
 - c. Preuse inspection checklists age the <u>EHSwebsite</u> Other preuse inspection checklists may be used if they meet the requirements of this program.
 - d. Completed preuse inspection checklists for overhead cranes must be submitted to supervisors.
 - ii. FrequentInspections
 - a. Complete a frequent inspection overhead cranes and ion ps-0.001 T

iv. LoadTests

- a. Documented load testare required for new or altered overhead crane and hoists and muste conducted by a qualified third party service.
- b. Load tests musinclude all items specified by the manufacturer engineer who designed and approved the equipment.
- v. Any safety defects, impairments, damage, or malfunctidissovered during pre-use, frequent, or annual inspections, or during load tests, must be report to department supervisors and the equipment bust be immediately removed from service and tagged with a label "Dangerous: Do Not Use" or similar wording until repaired or replaced

vi. Markings

- a. The rated load of the overhead crane or horistust be marked on the hoist or its load block and must legible from the ground or floor.
- b. Overhead crane and hoist controls must be marked to indicate the direction of the resultant motion
- c. Cranes and hoists must be marked with the name of the manufacturer, model or serial number, electrical supply specifics (for electricalpowered equipment), and rated air pressure (for pairwered equipment).
- d. Overhead cranes and hoists must have labels with product safety information, operating procedure and other relevant information as required by ANSI B30.16
- e. Rigging equipment must be marked with the name of the manufacturer, rated load, and other relevant inforati-0.7 (o)73.3 (n)-0.3 (a)-3.6 (s)-4.3 (r)8.1 (e)-

manufacturer, or a vendor who specializes in material handling equipment training.

B. Retraining

Retraining is required whenever:

- i. The operato's valid training period has expired (i.e., 3 years),
- ii. The operator is observed using the material handling equipment in an unsafe manner, or the performance of the operator isteteriorated,
- iii. Introduction to new or significantly different material handling equipment,
- iv. The operator is involved in an accident or nexiss incident, or
- v. A condition in the workplace changes that could affect safe operation.

VIII. Recordkeeping

Departments and units are responsible for maintaining the following records:

- A. Operatortraining documentation (i.e., person trained, person providing training, date of training, type of material handling equipment trained on) for as long as the operator will be operatingmaterial handling equipment.
- B. All inspection and test records must include the inspection and test performed, date any deficiencies found, corrective actions accomplished, and identification of person(s) performing the inspections and repairs.
- C. All material handling equipment inspection aintenance, service, and repair documentation must be retained and made available for as long as the material handling equipment is in operation.
- D. Service, part, and operatomanuals provided with each material handling equipment must be maintained for as long as the material handling equipment is in operation.

IX. Regulatory Authority and Related Information

Northwesternand contractors wilcomply with the Occupational Safety and Health Administrations (OSHAstandards American National Standards InstituteNSI) codesand any other applicable codes and standardscluding:

Northwestern's Control of Hazardous Energy (Lockout/Tagout) Program

OSHA29 CFRI 910.178-Powered Industrial Trucks

OSHA29 CFRI 910.179 – Overhead and Gantry Cranes

OSHA29 CFR 1926.602-Material Handling Equipment

OSHA Compliance Directive CPL28A-Compliance Assistance for the Powered Industrial Truck Operator Training Standards

ANSIB56.14969-Powered Industrial Trucks

ANSB30.22011 – Overhead and Gantry Cranes

ANSB30.92014-Slings

ANSB30.102010-Hooks

ANSB30.162012-Overhead Hoists

ANSB30.172015 - Cranes and Monorails

ANS B30.262004 - Rigging Hardware

X. Contact